Council Meeting of August 12, 2015

Agenda Item No. 7k

REQUEST FOR COUNCIL ACTION

SUBJECT: Request to consider a Road Closure of 8200 South (between 1550 West and 1480 West) to make changes to an underground sanitary sewer main

SUMMARY: Consider a request for a 3-week roadway closure on 8200 South from 1550 West to 1480 West to accommodate construction work on a new 8-inch sanitary sewer main.

FISCAL IMPACT: No fiscal impact for the roadway closure.

STAFF RECOMMENDATION:

Staff recommends approval of the request for a 3-week roadway closure on 8200 South between 1550 West and 1480 West to accommodate construction of a new 8-inch sanitary sewer main.

MOTION RECOMMENDED:

"I move to adopt Resolution No. 15-154 authorizing Staff to approve the road closure plan allowing a 3-week roadway closure on 8200 South to accommodate construction of a new 8-inch sanitary sewer main.

Roll Call vote required.

Prepared by:

Justin D. Stoker, P.E.
Deputy Director of Public Works

Reviewed by:

Wendell T. Rigby, P.E.
Director of Public Works

Reviewed as to Legal Sufficiency:

Darien Alcorn
Acting City Attorney

Recommended by:

Bryce Haderlie
Interim City Manager

BACKGROUND DISCUSSION:

Currently the sanitary sewer in 8200 South collects sanitary sewer from about 70 homes in the Green Briar subdivision before heading north from 8200 South and into the mobile home park between 8200 South and the railroad tracks, generally along 1500 West (a private road in the mobile home park).

The current arrangement has created a convoluted ownership and maintenance relationship between the private sewer of the mobile home park and the public sewer from the subdivision to the south. To clarify the situation, the City plans to connect the public sewer line in 8200 South eastward (instead of northward) into another public sewer line in the Fox Pointe subdivision. This will remove the City's involvement in the sewer line that runs through the mobile home park.

With approval, notification by an electronic traffic sign board will begin on August 14th and run for 10-days. Actual construction is scheduled to begin on August 24th and will run three weeks from August 24th until September 14th.

Due to the depth and alignment of the sewer line, it is preferred to temporarily close the road to eliminate the hazard of traffic through the construction area and to be able to complete the project is a safe and timely manner

No homes front the street in the area to be closed. Residents south and west of the project area, in the Green Briar subdivision, will use Redwood Road for access and residents east of the project area, in the Fox Pointe subdivision, will have access through 1300 West.

Attachments:

Resolution
Construction Plans

THE CITY OF WEST JORDAN, UTAH

A Municipal Corporation

RESOLUTION NO. 15-154

A RESOLUTION AUTHORIZING THE MAYOR TO APPROVE THE ROAD CLOSURE OF 8200 SOUTH FROM 1550 WEST TO 1480 WEST

Whereas, the City Council of the City of West Jordan has reviewed the road closure of 8200 South at 1550 West to 1480 West; and

Whereas, the City Council desires to authorize staff to temporarily close 8200 South from 1550 West to 1480 West for a period of three weeks from August 24, 2015 until September 14, 2015.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF WEST JORDAN, UTAH:

Section 1. Staff is hereby authorized to temporarily close 8200 South at 1550 West to 1480 West for a three-week period of time from August 24, 2015 until September 14, 2015.

Section 2. This Resolution shall take effect immediately.

Adopted by the City Council of West Jordan, Utah, this 12th day of August 2015.

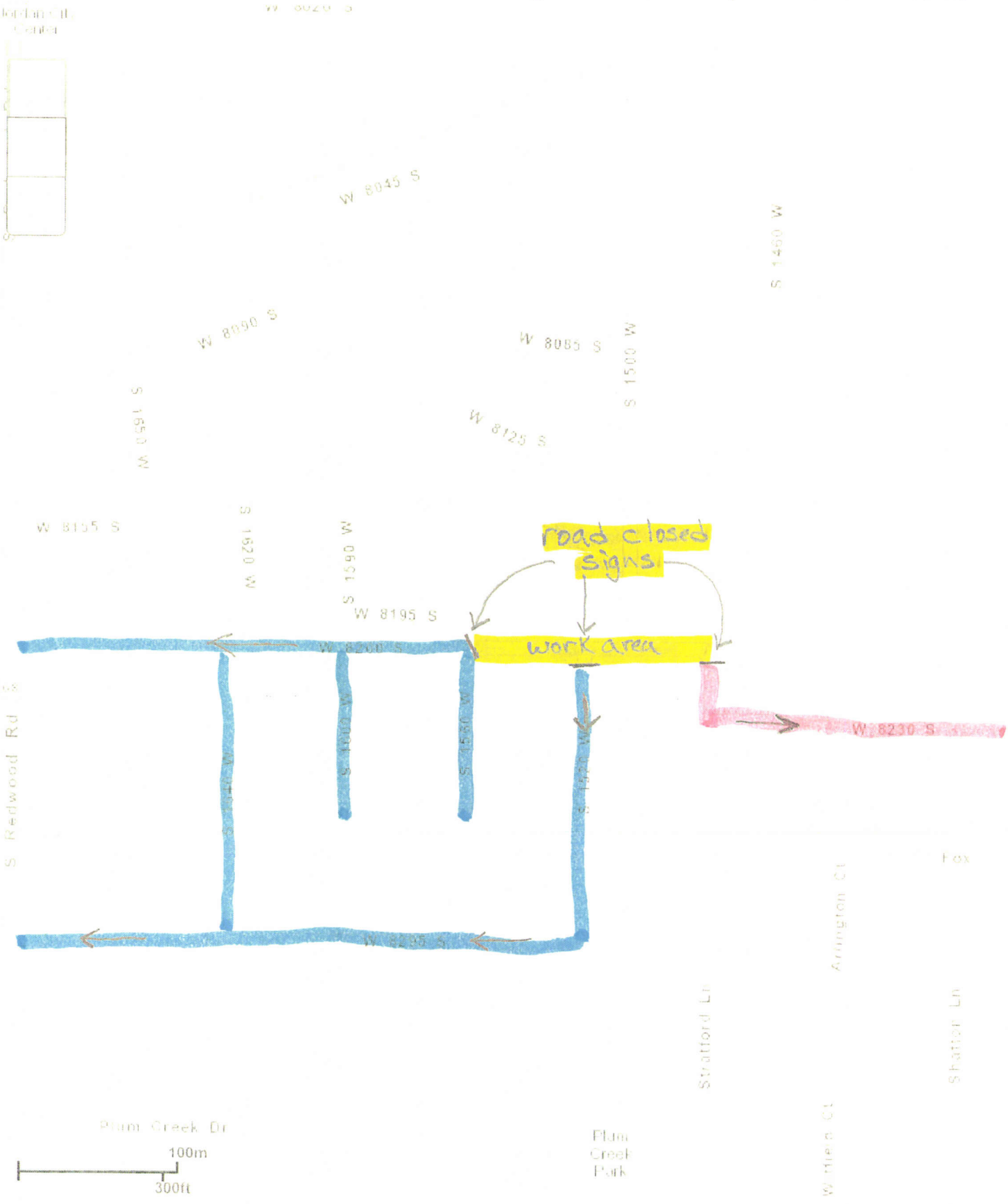
KIM V. ROLFE
Mayor

ATTEST:

MELANIE S. BRIGGS
City Recorder

Voting by the City Council	"AYE"	"NAY"
Jeff Haaga	____	____
Judy Hansen	____	____
Chris McConnehey	____	____
Chad Nichols	____	____
Sophie Rice	____	____
Ben Southworth	____	____
Mayor Kim V. Rolfe	____	____

Routing Legend Selection Locate Navigation Base Maps Measure Redline



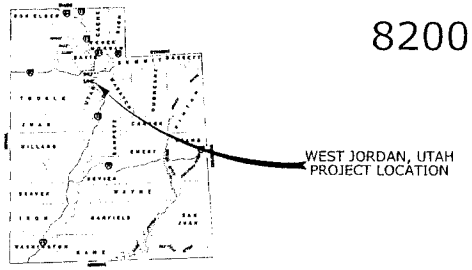
Routing Legend Selection Locate Base Maps Navigation Measure Redline

DRAWINGS FOR CONSTRUCTION OF

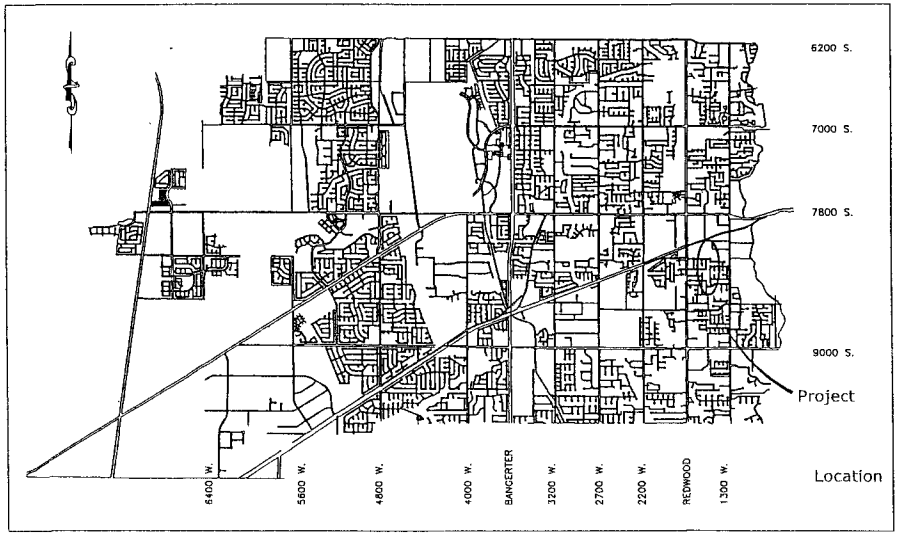
8200 SOUTH SEWER IMPROVEMENTS

Project SS-14-02

City of West Jordan, Utah



Project Vicinity Map



Project Location Map

INDEX TO SHEETS	
SHEET NO.	DESCRIPTION
GN-1	COVER, LOCATION MAP
GN-2	GENERAL NOTES
PP-01	PLAN / PROFILE SHEET
DT-01	PROJECT STANDARD DETAILS (RD-100,120)
DT-02	PROJECT STANDARD DETAILS (RD-115,110A)
DT-03	PROJECT STANDARD DETAILS (RD-175)
DT-04	PROJECT STANDARD DETAILS (SS-020,025)
DT-05	PROJECT STANDARD DETAILS (SS-030,035)
DT-06	PROJECT STANDARD DETAILS (SS-050,055)

RECOMMENDED FOR APPROVAL _____ 2015

PROJECT ENGINEER

RECOMMENDED FOR APPROVAL _____ 2015

CAPITAL PROJECTS MANAGER

RECOMMENDED FOR APPROVAL _____ 2015

DIRECTOR OF PUBLIC WORKS

LICENSED PROFESSIONAL ENGINEER
#334486
Gregory S. Davenport
STATE OF UTAH

CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

REVISIONS

Sewer System Improvements
8200 SOUTH
TITLE SHEET
SS-14-02

GN-1
DRG. NO.
SHT. 01 OF 09

GENERAL NOTES

1. THE CONTRACTOR SHALL CAREFULLY READ ALL OF THE NOTES AND SPECIFICATIONS, THE CONTRACTOR SHALL BE SATISFIED AS TO THEIR TRUE MEANING AND INTENT AND SHALL BE RESPONSIBLE FOR COMPLYING WITH EACH.

2. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE CURRENT CITY OF WEST JORDAN STANDARDS, PLANS AND SPECIFICATIONS. EXCEPT WHERE NOTED AS A DEVIATION FROM STANDARD ON THESE PLANS.

3. PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT THE CITY OF WEST JORDAN FOR A PRE-CONSTRUCTION CONFERENCE.

4. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE.

5. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

6. THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT AND SPECIFICATIONS. THEREFORE, THE OWNERS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTEDTHAT THE PRICES PROVIDED BY THE CONTRACTOR SHALL INCLUDE ALL LABOR, AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE.

   THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS ON THE NATURE, EXTENT, AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES, WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR PECULIAR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.

7. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMIT(S) AND COMPLY WITH ALL REQUIREMENTS OF GOVERNING AGENCIES.

8. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATIONOF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK.

   IF, DURING THE COURSE OF THEIR EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.

   SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGEMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATIONOF (1) THE SITE OF WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THIER KNOWLEDGE OF EXISITNG FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.

   THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOTINTENDED TO BE A SUBSITUTE FOR OR A SUPPLEMENT TO THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THATTHEY HAVE NOT RELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.

9. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES, AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.

10. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER AND/OR ENGINEER.

11. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO ORIGINAL OR BETTER CONDITION TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARDS SPECIFICATIONS.

13. EXISITNG UTILITIES SHOWN ON THE DRAWINGS ARE BASED ON A RECORD SEARCH BY LOCAL CONTROLLING AGENCIES AND ARE APPROXIMATELY LOCATED. EXISITNG UTILITIES ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF AND PRESERVING ALL UTILITIES INCLUDING THOSE NOT SHWON OR INCORRECTLY SHOWNON THE DRAWINGS. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES TWO (2) WEEKS IN ADVANCE OF UTILITY CONFLICT REQUIRING RELOCATION OF MAIN LINES, AND ONE WEEK IN ADVANCE OF CONFLICTS REQUIRING RELOCATION OF SERVICE LATERALS.

14. THE CONTRACTOR IS RESPONSIBLE FOR FOR LOCATING SERVICE LINES FOR GAS, SEWER, WATER, AND OTHER UTILITIES AND REPAIRING ANY DAMAGE TO SUCH LINES AS A RESULT OF THE CONTRACTOR'S OPERATIONS. IN GENERAL, SERVICE CONNECTIONS FOR UTILITIES ARE NOT SHOWN ON THE DRAWINGS.

15. CONTRACTOR SHALL CONTACT BLUE STAKES AT (801) 532-5000 FOR MARKING EXISTING UTILITIES PRIOR TO PERFORMING ANY EXCAVATION. CALL FOR UNDERGROUND LOCATING TWO WORKING DAYS PRIOR TO ANY EXCAVATION.

16. CONTRACTOR SHALL BE SOLELY *RESPONSIBLE TO PROVIDE* ALL TEMPORARY EROSION CONTROL AND MAINTENANCE AND SHALL PROVIDE EROSION AND SEDIMENT CONTROL FORMS TO THE CITY OF WEST JORDAN.

17. DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTOR'S EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH THE CITY OF WEST JORDAN REQUIREMENTS.

18. ANY NEW PAVEMENT MARKINGS OR PAVEMENT MARKINGS THAT ARE REMOVED FROM THE HIGHWAY ARE TO BE REPLACED WITH IN KIND MATERIALS SUCH AS 3M TAPE, THERMOPLASTIC, ETC. ALL PAINT LINES ARE TO BE INSTALLED WITH PERMANNET PAINT APPLICATION BEFORE COMPLETION OF THE PERMIT AND MUST HAVE AT LEAST 6 MONTHS LIFE AS DETERMINED BY UDOT'S PERMITS OFFICER.

19. ALL TRAFFIC CONTROL IS TO BE PROVIDED BY THE CONTRACTOR. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION IS TO CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION. JORDAN SCHOOL DISTRICT SHALL BE NOTIFIED WHEN WORK ENROACHES INTO A "SAFE SCHOOL WALKIONG ROUTE". CONTRACTOR SHALL COODINATE EFFORTS WITH SCHOOL CROSSING GAURDS TO ENSURE SAFETY OF THE STUDENTS.

20. CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

SYMBOL LEGEND

EXISTING MANHOLE	O	EXISTING FENCE/NEW FENCE	——O——O——
EXISTING VALVE	⋈	EXISTING GAS LINE	——G——
EXISTING FIRE HYDRANT		EXISTING TELEPHONE LINE	——TH——TH——
EXISTING GAS METER	G	EXISTING STORM DRAIN LINE	——SD——SD——
EXISTING WATER METER	W	EXISTING SEWER LINE	——SS——SS——
EXISTING TELEPHONE BOX	T	EXISTING WATER LINE	——W——W——
EXISTING ELECTRICAL BOX	E	EXISTING POWER LINE	——P——P——
EXISTING UTILITY POLE	●	EXISTING CABLE TV	——C——
FOUND SECTION CORNER		PROPOSED R/W LINE	—— · ——
EXISTING LIGHT POLE			
EXISTING SIGN			
EXISTING SIGNAL POLE			

UTILITY COMPANY CONTACT PERSONS

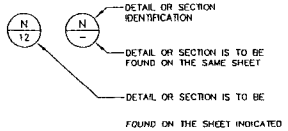
West Jordan City
Mr. David Murphy, P.E.
8000 South Redwood Road
West Jordan, Utah 84088
Tel. 801-569-5074
E-mail davidm@wjordan.com

West Jordan Utility Manager
Mr. Roger Payne, P.E.
8000 South Redwood Road
West Jordan, Utah 84088
Tel. 801-569-5078
E-mail rogerp@wjordan.com

West Jordan Water /Sewer Department
Craig Frisby
8040 South 4000 West
West Jordan, Utah 84088
Tel. 801-569-5707

West Jordan Sewer Department
Justin Rayl
8040 South 4000 West
West Jordan, Utah 84088
Tel. 801-330-3311

DETAIL REFERENCE



CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

DESIGN | DRAWN | COUNT | CHECK | CHECK | CHECK

APPROVAL RECOMM. | DATE | PROJECT DESIGN ENGINEER | APPROVED FOR USE BY | DATE | CAPITAL PROJECTS MANAGER

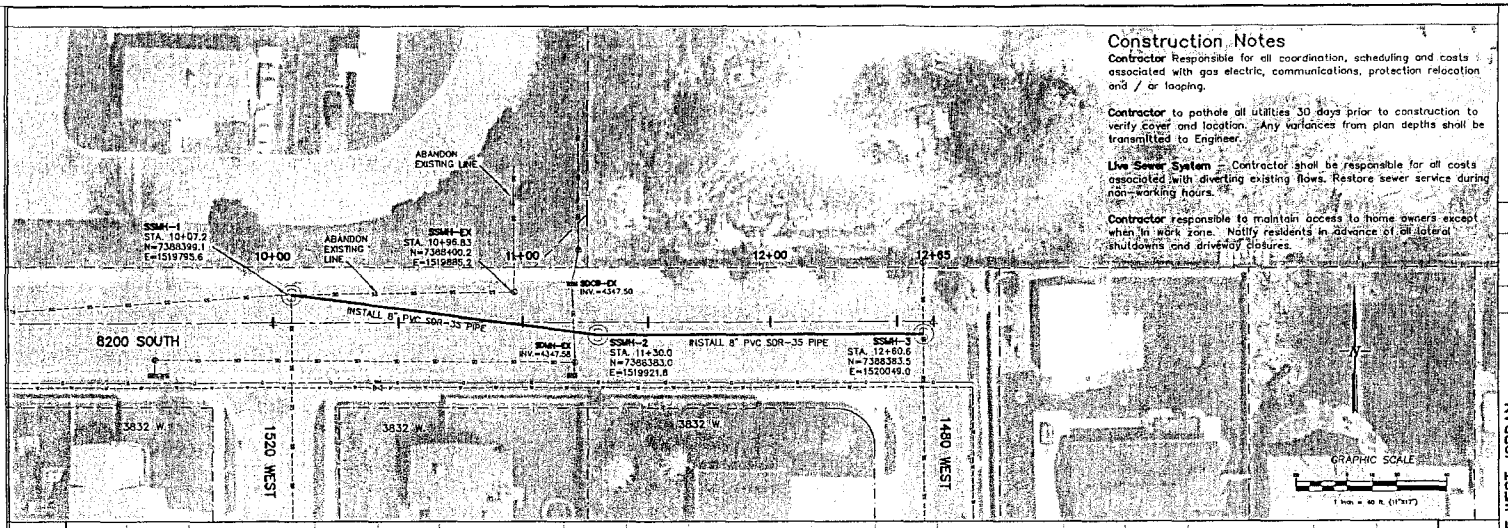
NO. | DATE | BY | REVISIONS

Sewer System Improvements
8200 SOUTH
General Notes

PROJECT NUMBER SS-14-02

GN-2
DRG. NO.

SHT 02 OF 9



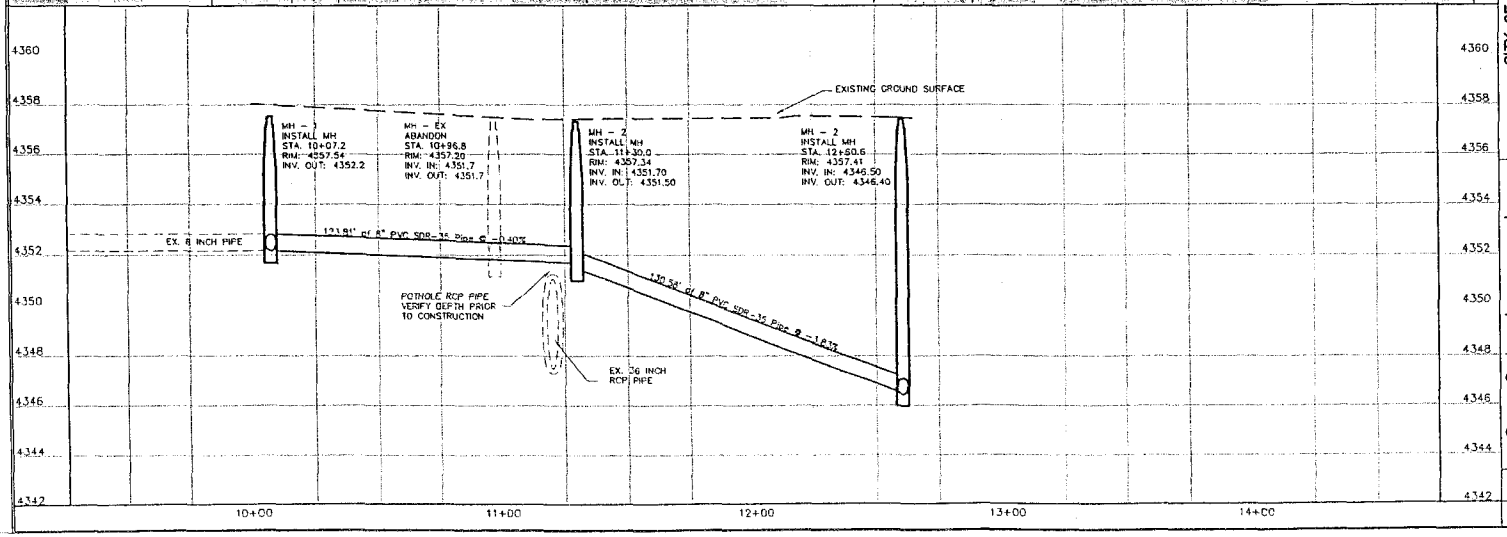
Construction Notes

Contractor Responsible for all coordination, scheduling and costs associated with gas electric, communications, protection relocation and / or looping.

Contractor to pothole all utilities 30 days prior to construction to verify cover and location. Any variances from plan depths shall be transmitted to Engineer.

Live Sewer System – Contractor shall be responsible for all costs associated with diverting existing flows. Restore sewer service during non-working hours.

Contractor responsible to maintain access to home owners except when in work zone. Notify residents in advance of all lateral shutdowns and driveway closures.



NO.	DATE	BY	REVISIONS
			REMARKS

CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SEWER DESIGN

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QUANT
PROJECT ENGINEER
CAPITAL PROJECTS MANAGER
APPROVAL RECOMMENDED
APPROVED BY WJC
DATE
DATE

Sewer System Improvements
8200 SOUTH
PLAN & PROFILE SHEET
SS-14-02
PROJECT NUMBER

PP-01
DWG. NO.

SHT. 03 OF 09

1. UNTREATED BASE COURSE: Use Class A untreated base coarse grade 1 or grade 3/4 per APWA Section 32 11 23. Use of sewer rock or recycled aggregate requires ENGINEER's written approval.

   A. Place backfill material per APWA Section 32 05 10.

   B. Compact backfill material per APWA Section 31 23 26 to a moffied proctor density of 95 percent or greater.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.

   A. If necessary, provide concrete which achieves design strength in 72 hours (3 days). Use caution, however, as spider cracks develop if air temperature exceeds 90 degrees F.

   B. Place concrete per APWA Section03 30 10 .

   C. Provide 1/2 inch radius on all exposed concrete edges unless otherwise shown.

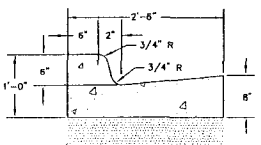
   D. Apply a sealing/curing compound per APWA Section 03 39 00.

3. EXPANSION JOINTS:

   A. Provide full depth 1/2 inch thick F1 joint filler material per APWA Section 32 13 73. Set top of filler flush with surface of concrete. Place xpansion joints every 50 feet.

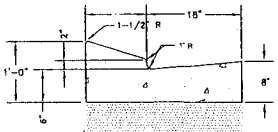
   B. Expansion joints are not required in slip form work except at the start or end of the work day, and at the start or end of a street intersection curb radius return.

4. CONTRACTION JOINTS: Make contraction oints vertical, at least 1/8" wide, and 2 inches deep or 1/4 slab thickness if the slab is greater than 8 inches thick. Place contraction joints every 10 feet.



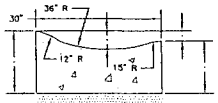
6" COMPACTED UNTREATED BASE COURSE REQUIRED - SEE NOTE 1

TYPE A CURB & GUTTER
NEW CONSTRUCTION



6" COMPACTED UNTREATED BASE COURSE REQUIRED - SEE NOTE 1

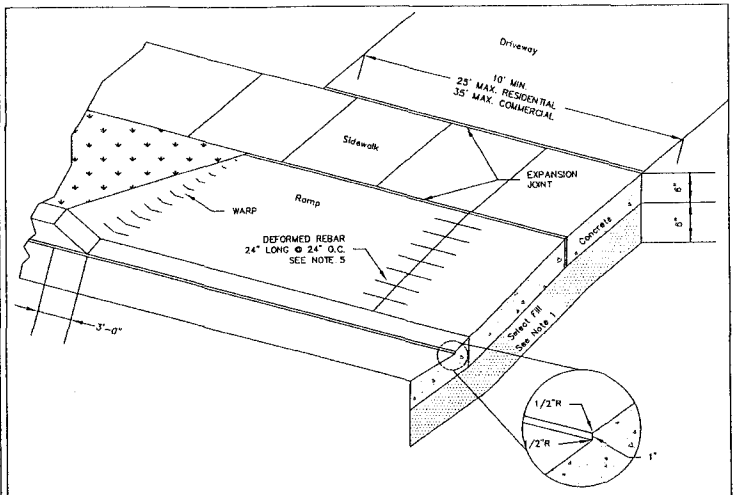
TYPE B CURB & GUTTER
REPLACEMENT ONLY



6" COMPACTED UNTREATED BASE COURSE REQUIRED - SEE NOTE 1

TYPE C CURB & GUTTER
REPLACEMENT ONLY

RD-100 STANDARD CURB & GUTTER



1. UNTREATED BASE COURSE: Use Class A untreated base coarse grade 1 or grade 3/4 per APWA Section 32 11 23. Use of sewer rock or recycled aggregate requires ENGINEER's written approval.

   A. Place backfill material per APWA Section 32 05 10.

   B. Compact backfill material per APWA Section 31 23 26 to a moffied proctor density of 95 percent or greater.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.

   A. If necessary, provide concrete which achieves design strength in 72 hours (3 days). Use caution, however, as spider cracks develop if air temperature exceeds 90 degrees F.

   B. Place concrete per APWA Section03 30 10 .

   C. Provide 1/2 inch radius on all exposed concrete edges unless otherwise shown.

   D. Apply a sealing/curing compound per APWA Section 03 39 00.

3. EXPANSION JOINTS:

   A. Provide full depth 1/2 inch thick F1 joint filler material per APWA Section 32 13 73. Set top of filler flush with surface of concrete. Place xpansion joints every 50 feet.

   B. Expansion joints are not required in slip form work except at the start or end of the work day, and at the start or end of a street intersection curb radius return.

4. CONTRACTION JOINTS: Make contraction oints vertical, at least 1/8" wide, and 2 inches deep or 1/4 slab thickness if the slab is greater than 8 inches thick. Place contraction joints every 10 feet.

5. REINFORCEMENT: Use ASTM A 615, grade 60 galvanized or epoxy coated deformed steel rebar. See APWA Section 03 20 00.

RD-120 STANDARD DRIVE APPROACH

CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

DESIGN | CHECK
DRAWN | CHECK
PROJECT DESIGN ENGINEER | DATE
CAPITAL PROJECTS MANAGER | DATE

REVISIONS

NO.	DATE	BY	REMARKS

Sewer System Improvements
8200 SOUTH
Typical Details

PROJECT NO. SS-14-02

DT-01
DRG. NO.

SHT. 04 OF 09

1. UNTREATED BASE COURSE: Use Class A untreated base coarse grade 1 or grade 3/4 per APWA Section 32 11 23. Use of sewer rock or recycled aggregate requires ENGINEER's written approval.

   A. Place backfill material per APWA Section 32 05 10.

   B. Compact backfill material per APWA Section 31 23 26 to a mofified proctor density of 95 percent or greater.

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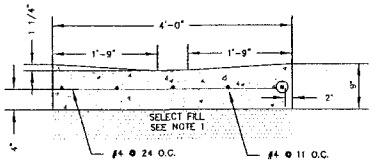
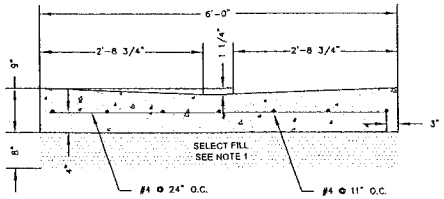
5. REINFORCEMENT: Use ASTM A 615, grade 60 galvanized or epoxy coated deformed steel rebar. See APWA Section 03 20 00.



4' WATERWAY SECTION

REPLACEMENT ONLY



6' WATERWAY SECTION

REPLACEMENT ONLY

RD-115 STANDARD WATERWAY

1. UNTREATED BASE COURSE: Use Class A untreated base coarse grade 1 or grade 3/4 per APWA Section 32 11 23. Use of sewer rock or recycled aggregate requires ENGINEER's written approval.

   A. Place backfill material per APWA Section 32 05 10.

   B. Compact backfill material per APWA Section 31 23 26 to a mofified proctor density of 95 percent or greater.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.

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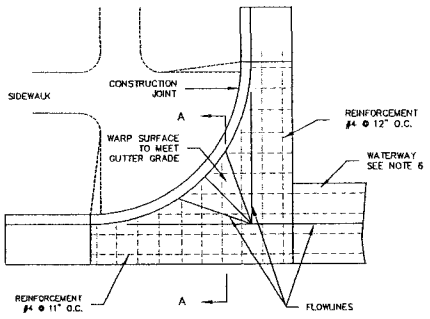
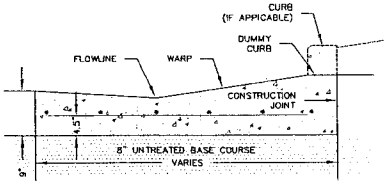


PLAN



SECTION A – A

REPLACEMENT ONLY

RD-110A STANDARD WATERWAY TRANSITION

CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

Sewer System Improvements
8200 SOUTH
Typical Details
PROJECT NO. SS-14-02

DT-02
DRG. NO.

SHT. 05 OF 09

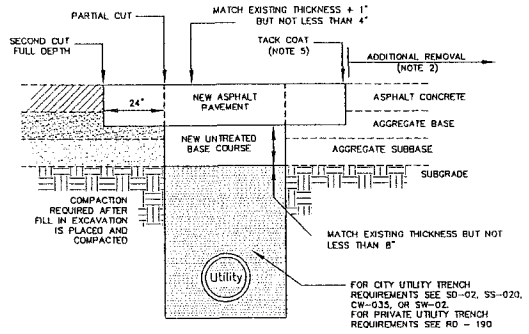
REVISIONS

NO.	DATE	BY	REMARKS

DESIGN CHECK
DRAWN CHECK
CHECK
PROJECT ENGINEER DATE
CAPITAL PROJECTS MANAGER DATE
APPROVAL RECOMMENDED
APPROVED FOR USE BY APWA
PROJECT NUMBER

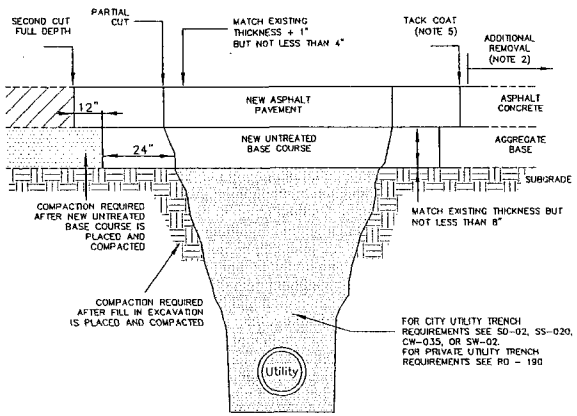
SHALLOW EXCAVATION ASPHALT CONCRETE TRENCH PATCH

(42" OR LESS FROM PAVEMENT SURFACE TO BOTTOM OF EXCAVATION)



DEEP EXCAVATION ASPHALT CONCRETE TRENCH PATCH

(GREATER THAN 42" FROM PAVEMENT SURFACE TO BOTTOM OF EXCAVATION)



ASPHALT CONCRETE TRENCH PATCH CONSTRUCTION NOTES

1. INSPECTION REQUIREMENTS: West Jordan City Inspection Department must be notified for the following inspection appointments 48 hours in advance:

   A. A. Nose – on or tap.
   B. Backfill and compaction.
   C. Roadbase compaction.
   D. Preparation of surface for asphalt.
   E. Asphalt placement and compaction.

   Surface restoration shall be done within 72 hours of excavation.

2. ADDITIONAL PAVEMENT REMOVAL: Remove additional pavement to a painted lane stripe, a lip of gutter, a curb, an existing pavement patch, or an edge of the pavement on all Collector or Arterial Streets. On Residential Streets, remove additional pavement to a lip of gutter, a curb, an exisitng pavement patch , or an edge of pavement if such street feature is within 2 feet of the second saw cut.

3. NEW UNTREATED BASE COURSE: Provide aggregate class "A" untreated base course material specified in APWA Section 32 11 23. Do not use gravel or sewer rock. Place new material per AWPA 32 05 10. Compact per APWA Section 31 23 26 to a modified proctor density of 95 percent in lifts not exceeding 6 inches thick after compaction.

4. FLOWABLE FILL: When required by the City Engineer, provide 28 day 60 psi controlled low strength material per APWA Section. Cure to intial set before placing aggregate base or asphalt pavement.

5. TACK COAT: Place as specified in APWA Section 32 12 14. Provide full tack coat coverage on all vertical surfaces.

6. ASPHALT PAVEMENT: Use hot mix asphalt concrete as specified in APWA Section 33 05 25. Install in 3 inch lifts. Compact to 94 percent of ASTM D2041 (Rice Method) plus or minus two percent.

7. JOINT REPAIR: If a crack occurs at the "T" patch connection to the exisiting pavement or at any street fixture, repair crack per APWA Section 32 01 17.

8. PATCH REPAIRS: Repair the following conditions during the correction period.

   A. Pavement surface distortion exceeds1/4 inch deviation in 10 feet. Repair Option: Plane off surface distortions. Coat with cationic or anionic emulsion that complies with APWA 32 12 03 and provide sand blotter.
   B. Cracks 1/4 wide and 1 foot long occur more often than 1 in 10 square feet. Repair option: Crack Seal per APWA 32 01 17.
   C. Asphalt raveling is greater than 1 square feet in 10 square feet. Repair option: Mill and Inlay.

9. TRAFFIC CONTROL: Applicant is required to provide adequate work zone traffic control as specified in the manual on uniform traffic control devices. (MUTCD)

10. IDENTIFICATION: A sign shall be posted at site that includes the contractor's name and emergency telephone number.

11. AS-BUILT DRAWINGS: Upon completion of the project the contractor shall supply the City with a complete set of as-built drawings as defined in Section 72 of City code.

RD-175 STANDARD TRENCH EXCAVATION

CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

DESIGN | CHECK
DRAWN | CHECK
QUANT | CHECK

APPROVAL RECOMMENDED | DATE | PROJECT DESIGN ENGINEER
APPROVED FOR USE BY MIC | DATE | CAPITAL PROJECTS MANAGER

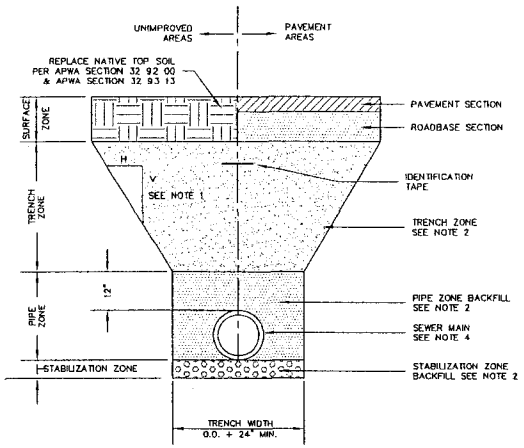
NO. | DATE | BY | REVISIONS

Sewer System Improvements
8200 SOUTH
Typical Details

PROJECT NUMBER
PROJECT NO. SS-14-02

DT-03
DRG. NO.

SHT. 06 OF 09

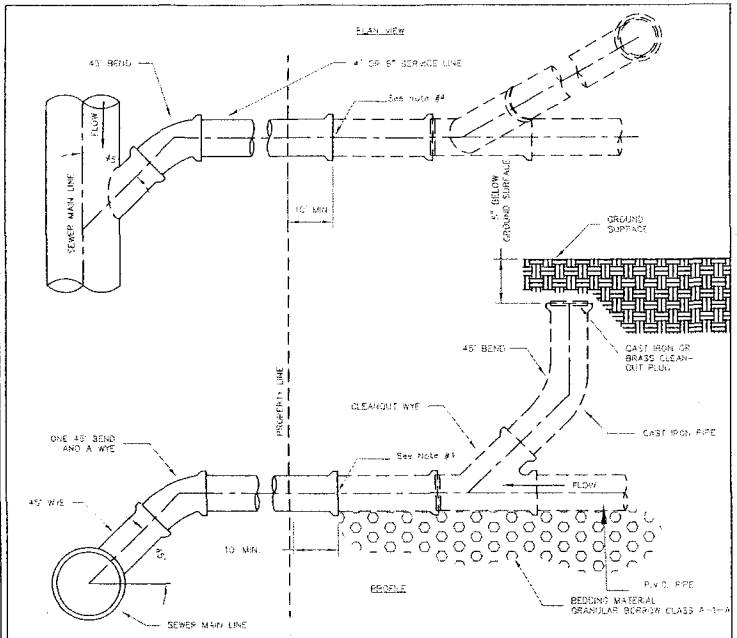


1. EXCAVATION: trench excavation per APWA Section 31 41 00. Excavation protection shall be provided in accordance with OSHA and UOSH safety standards and with APWA Section 31 23 16 and all State and Federal laws for trench safety..
2. BACKFILL: Backfill operations shall comply with APWA Section 33 05 20 "Backfilling Trenches". Backfill materials shall complywith APWA Section 31 05 13 " Common Fill" and Section 32 11 23 "Crushed Aggregate Base" with material selection as follows:

	UNIMPROVED AREAS	PAVEMENT AREAS
STABILIZATION ZONE	2" Minus Sewer Rock	2" Minus Sewer Rock
PIPE ZONE	Gravel Grade 3/4	Gravel Grade 3/4
TRENCH ZONE	Granular Backfill Borrow	Granular Backfill Borrow
SURFACE ZONE	Native Top Soil Replace Vegetation to preconstruction condition	Untreated Base Course Grade 3\4 Pavement restoration per RD SPEC'S

3. COMPACTION: Compaction of backfill materials shall comply with APWA Section 31 23 26 to a modified proctor density of 95 percent.
4. INSTALLATION OF PIPE: Install pipe per APWA Section 33 31 00 "Sanitary Sewage Systems". Install pipe on stable foundation with uniform bearing.
5. PAVEMENT RESTORATION: Do not install pavement or roadbase section until trench compaction is accepted by ENGINEER>

SS-020 SEWER TRENCH



NOTES:

1. INSPECTION:
   - A. Prior to installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings.
   - B. Prior to backfilling sewer lateral, secure inspection of installation by ENGINEER.
2. INSTALLATION:
   - A. Provide West Jordan City Utilities Department approved wye or tee with appropriate donut.
   - B. Tape wrap pipe as required by soil conditions.
   - C. Core out plug in sewer main. Do not pump into sewer main to make connection.
3. BACKFILL: Backfill materials shall comply with APWA Section 31 05 13 "Common Fill" and APWA Section 32 11 23 "Crushed Aggregate Base. Backfill shall be placed APWA Section 33 05 20 "Backfilling Trenches" and compacted per APWA Section 31 23 26 " Compaction " to a modified proctor density of 95 percent..
4. LOCATION: Contractor to mark end of lateral w/ 2x4 and record location.

SS-025 SEWER SERVICE LATERAL

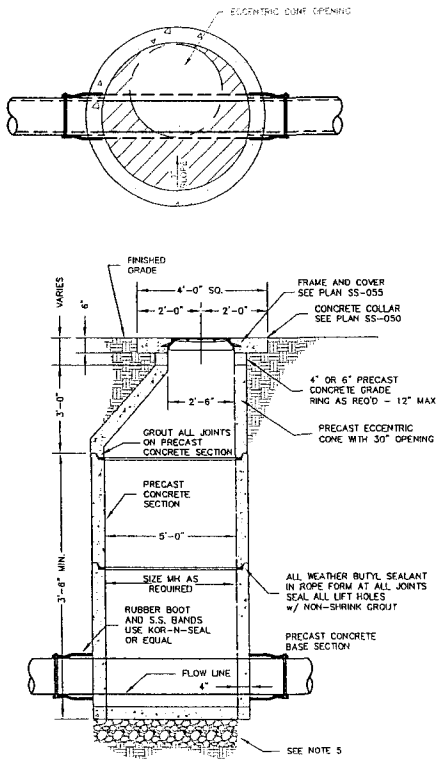
CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

Sewer System Improvements
8200 SOUTH
Typical Details
PROJECT NO. SS-14-02

DT-04
DRG. NO.

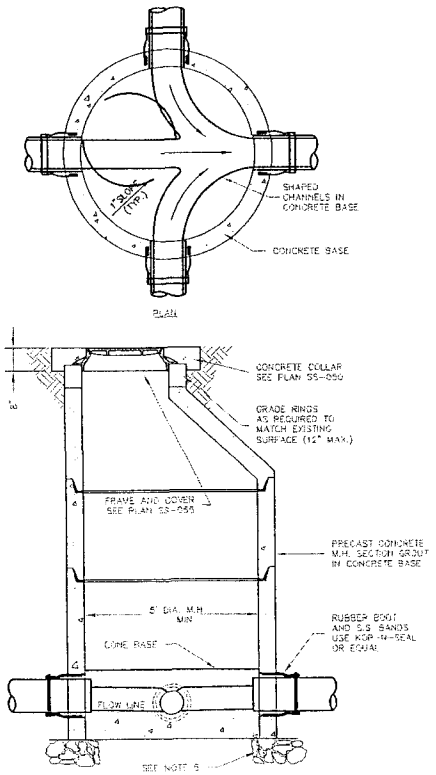
SHT. 07 OF 09

1. SELECT FILL: Use Class A untreated base course grade 1 or grade 3/4 per APWA Section 32 11 23. Use of sewer rock or recycled aggregate requires ENGINEER's written approval.
2. BACKFILL: Install backfill material per APWA Section 31 23 23. Compact to a modified proctor density of 95 percent per APWA Section 31 23 26.
3. CONCRETE: Class 4,000 per APWA Section 03 30 04 for both precast and cast in place applications. Apply a sealing/curing compound per APWA Section 03 39 00.
4. REDUCING RISER: When a depth of manhole from pipe invert to finish grade exceeds 6'-7", use a reducing riser section.
5. FOUNDATION: Foundation to rest on 6" of 1½" maximum graded rock or on firm undisturbed soil when directed by ENGINEER and indicated by soils report.
6. JOINTS: Place flexible gasket type sealant in manhole joints.
7. BASE OF MANHOLE: Pour in one continuous operation.
8. FINISH: Provide smooth and neat finishes on the interior of cones, shafts and rings. Imperfect moldings or honeycombs will not be accepted.



SS-030 IN-LINE MANHOLE

1. SELECT FILL: Use of Class A untreated base course grade 1 or grade 3/4 per APWA Section 32 11 23. Use of sewer rock or recycled aggregate requires ENGINEER's written approval.
2. BACKFILL: Install backfill material per APWA Section 31 23 23. Compact backfill to a modified proctor density of 95 percent per APWA Section 31 23 26.
3. CONCRETE: Class 4,000 per APWA Section 03 30 04 for both precast and cast in place applications. Apply a sealing/curing compound per APWA Section 03 39 00.
4. REDUCING RISER: When a depth of manhole from pipe invert to finish grade exceeds 6'-7", use a reducing riser section.
5. FOUNDATION: Foundation to rest on 6" of 1½" maximum graded rock or on firm undisturbed soil when directed by ENGINEER and indicated by soils report.
6. JOINTS: Place flexible gasket type sealant in manhole joints.
7. BASE OF MANHOLE: Pour in one continuous operation.
8. FINISH: Provide smooth and neat finishes on the interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.



SS-035 JUNCTION MANHOLE

CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

Sewer System Improvements
8200 SOUTH
Typical Details

PROJECT NO. SS-14-02

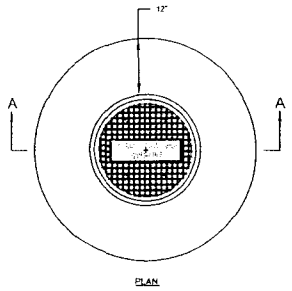
DT-05
DRG. NO.

SHT. 08 OF 09

REVISIONS

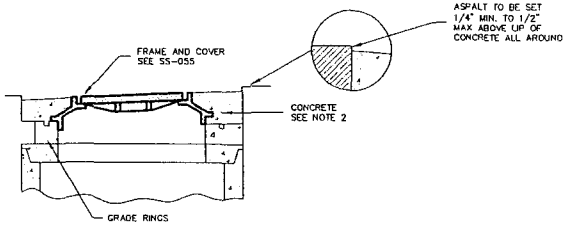
NO.	DATE	BY	REMARKS

DESIGN | CHECK
DRAWN | CHECK
QUANT. | CHECK
PROJECT ENGR. (DESIGN) | DATE
APPROVED FOR USE BY PUBLIC WORKS | DATE
CAPITAL PROJECTS MANAGER
APPROVING DIVISION
PROJECT NUMBER



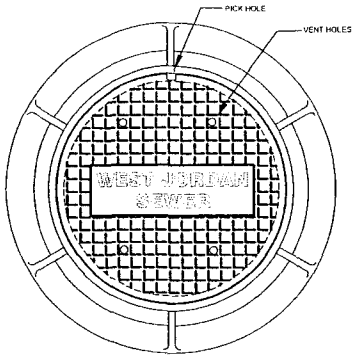
PLAN

1. ADJUST TO GRADE: Adjust incidental structure to grade per APWA Section 33 05 14
2. CONCRETE: class 4,000 per APWA Section 03 30 04, apply a sealing/curing compound per APWA Section 03 39 00 or use an acceptable alternate curing method.
3. JOINTS: Provide a neat straight joint between existing and new asphalt concrete surfaces. Provide concentric circle or straight edge cut. Clean edges of all dirt, oil and loose debris.

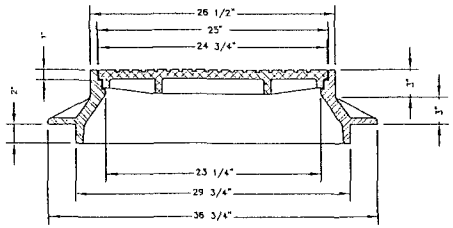


SECTION A-A

SS-050 CONCRETE COVER COLLAR



1. CASTINGS: Gray iron class 30 minimum per ASTM A 48.
2. COATINGS: Except machined surfaces, coat all metal parts with asphaltum paint.
3. INSCRIPTIONS: Cast the words "WEST JORDAN" and "SEWER" on the cover flush with the surface finish.
4. HEAT NUMBER: Place foundry and heat number on the inside of the frame and on the bottom of the cover.
5. FIT: Give the frame and cover a machine finish so the cover will not rock.
6. LOCKING: Provide covers for manholes located in easements, rights of way, alleys parking lots, and all other places except paved streets, with allen socket set screw locking devices. Drill and tap two holes to a depth of 1 inch at 90 degrees to pry and install 3/4" x 3/4" inch allen socket set screws.
7. MANHOLE STRUCTURES: See Plan SS-030, SS-035 , SS-045, SS-060, Ss-065.
8. VENTILATION: Standard is for vented manhole except as needed for problems.



SS-055 FRAME AND COVER

CITY OF WEST JORDAN
CAPITAL PROJECTS DIVISION
SANITARY SEWER DESIGN

DESIGN | DRAWN | CHECK | CHECK | CHECK

APPROVAL RECOMMENDED — DATE — PROJECT ADMIN. ENGINEER
APPROVED FOR USE BY WJC — DATE — CAPITAL PROJECTS MANAGER

NO.	DATE	BY	REVISIONS

Sewer System Improvements
8200 SOUTH
Typical Details

PROJECT NUMBER
PROJECT NO. SS-14-02

DT-06
DRG. NO.

SHT. 09 OF 09